# Contents of Volume 44

**No. 1**

*C.D. Geisler (U.S.A.)*
Evidence for expansive power functions in the generation of the discharges of 'low- and medium-spontaneous' auditory-nerve fibers 1

*N.Y. Marcus and D.C. Marcus (U.S.A.)*
Transepithelial electrical responses to sodium and potassium of nonsensory region of gerbil utricle 13

*P.K. Plinkert, A.H. Gitter, U. Zimmermann, T. Kirchner, S. Tzartos and H.P. Zenner (F.R.G., Greece)*
Visualization and functional testing of acetylcholine receptor-like molecules in cochlear outer hair cells 25

*W.J. Melssen and W.J.M. Epping (The Netherlands)*
A combined sensitivity for frequency and interaural intensity difference in neurons in the auditory midbrain of the grassfrog 35

*K.I. McAnally and M.B. Calford (Australia)*
Neural sensitivity to phase of high frequency tones 51

*H. Fujita (Japan)*
Mutant golden hamsters with an abnormal outer hair cell stereociliary arrangement 63

*W.F. Sewell (U.S.A.)*
Synaptic potentials in afferent fibers innervating hair cells of the lateral line organ in *Xenopus laevis* 71

*E. de Boer (The Netherlands)*
Can shape deformations of the organ of Corti influence the travelling wave in the cochlea? 83

Short Communication
*K.I. McAnally and M.B. Calford (Australia)*
A psychophysical study of spectral hyperacuity 93

Announcement 97

**No. 2, 3**

*R.D. Frisina, R.L. Smith and S.C. Chamberlain (U.S.A.)*
Encoding of amplitude modulation in the gerbil cochlear nucleus: I. A hierarchy of enhancement 99

*R.D. Frisina, R.L. Smith and S.C. Chamberlain (U.S.A.)*
Encoding of amplitude modulation in the gerbil cochlear nucleus: II. Possible neural mechanisms 123

*W. Jian, D. Wei-jia and C. Ji-sheng (China)*
Changes in endocochlear potential during anoxia after intense noise exposure 143

*P. Avan, D. Loth, C. Menguy and M. Teyssou (France)*
Evoked otoacoustic emissions in guinea pig: Basic characteristics 151

*I.M. Winter and A.R. Palmer (U.K.)*
Responses of single units in the anteroventral cochlear nucleus of the guinea pig 161

*C.A. Prosen, D.B. Moody, W.C. Stebbins, D.W. Smith, M.S. Sommers, J.N. Brown, R.A. Altschuler and J.E. Hawkins, Jr. (U.S.A.)*
Apical hair cells and hearing 179

*R. Rajan, D. Robertson and B.M. Johnstone (Australia)*
Absence of tonic activity of the crossed olivocochlear bundle in determining compound action potential thresholds, amplitudes and masking phenomena in anaesthetised guinea pigs with normal hearing sensitivities 195

*E. Zwicker and W. Peisl (F.R.G.)*
Cochlear preprocessing in analog models, in digital models and in human inner ear 209

*M. Kössl, G.P. Richardson and I.J. Russell (U.K.)*
Stereocilia bundle stiffness: Effects of neomycin sulphate, A23187 and Concanavalin A 217

*P. Van Dijk, E.R. Lewis and H.P. Wit (The Netherlands, U.S.A.)*
Temperature effects on auditory nerve fiber response in the American bullfrog 231

*C.D. Geisler, G.K. Yates, R.B. Patuzzi and B.M. Johnstone (Australia)*
Saturation of outer hair cell receptor currents causes two-tone suppression 241

*Announcements* 257

*Contents of Volume 44* 259

*Author Index* 261

*Subject Index* 263